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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRAN, DALENA

ART UNIT PAPER NUMBER

3661

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,405

Applicant(s)

LAFON ET AL.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,14-29 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12,14-29 and 31-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 1/13/05. As per request, claims 1, 17-18 have been amended. Claims 13,30 have been cancelled. Claims 35-40 have been added. Thus, claims 1-12,14-29,31-40 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3,5-12,14-15,18-20,22-29, and 31-32, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141) in view of Snyder et al. (6,664,989), and Marks et al. (5,699,082).

As per claims 1 and 18, Briffe et al. disclose a dialog system for dialog between an operator of an aircraft and at least one system of the aircraft, comprising: a display configured to display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft (see at least column 3, lines 6-30; and column 4, line 66 to column 5, line 13), a first cursor control device (see at least column 5, lines 35-39), and a second cursor control device (see at least column 5, lines 26-30). Briffe et al. do not explicitly disclose a continuous and discrete cursor moving mechanism. However, Snyder et al. disclose a continuous cursor moving mechanism configured to move a

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cursor in a continuous manner on the display so as to designate a responsive object (see at least column 6, lines 38-52), and a discrete cursor moving mechanism configured to move a cursor in a discrete manner on the display (see at least column 6, line 53 to column 7, line 35). Snyder et al. do not explicitly disclose responsive object by object, so as to designate a responsive object. However, Snyder et al. disclose user interface cursor control, integration of discrete button movement (see at least the abstract); and discrete events applied (see at least column 7, lines 59-65). It would have been obvious to one of ordinary skill in the art that a "discrete event" can be used to trigger successive jump (one after another), therefore, the discrete event of the cursor movement implies the cursor move in a discrete manner, responsive object by object, so as to designate a responsive object. Also, Snyder et al. disclose the pilot interacts with the map through the multifunctional keyboard (see at least column 3, line 42); it is obvious that an input keyboard create a discrete event, responsive object by object, so as to designate a responsive object. Briffe et al., and Snyder et al. do not explicitly disclose to move the cursor in a cyclical manner. However, Marks et al. disclose to move the cursor in a cyclical manner on the display (see at least columns 6-7, lines 47-47; column 8, lines 13-30; and columns 10-11, lines 51-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the cursor disclose in Briffe et al. in a continuous and discrete cursor moving mechanism for a pilot capable of selecting continuous or immediately a text or a graphic in a flight cockpit interface depend on each situation. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the cursor to move in a cyclical manner to help it easier for step through a sequence automatically without have to go backward step by step.

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Also, as per claims 2, and 19, Snyder et al. disclose the continuous cursor moving mechanism is a control ball on a mouse (see at least column 3, lines 8-11). Briffe et al., and Snyder et al. do not explicitly disclose an arrow key on a keyboard. However, Snyder et al. disclose discrete cursor movement to left, right, up and down (see at least column 7, lines 61-65). It would have been obvious to one of ordinary skill in the art that the left, right, up and down control movement button can be labeled as an arrow key, because an arrow key perform a function of move to the left, right, up and down.

Also, as per claims 3 and 20, Snyder et al. disclose the first cursor control device includes a first activation mechanism configured to activate a function associated with the responsive object designated by the continuous cursor moving mechanism (see at least column 3, lines 8-18), and wherein the second cursor control device includes a second activation mechanism configured to activate a function associated with the responsive object designated by the discrete cursor moving mechanism (see at least column 3, lines 39-47; and column 7, lines 59-65).

As per claims 5 and 22, Briffe et al. do not explicitly disclose one window includes a plurality of windows. However, Snyder et al. disclose the at least one window includes a plurality of windows, and wherein the second cursor control device includes an auxiliary moving mechanism configured to move the cursor discretely from one window to another window in the plurality of windows (see at least columns 3-4, lines 39-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining a plurality of windows for comparing and displaying many selection of graphical and textual of the flight plan at the same time.

As per claims 6 and 23, Briffe et al. do not explicitly disclose each window is divided into a plurality of fields and each window includes one default field. However, Snyder et al. disclose each window is divided into a plurality of fields each including at least one responsive object (see at least column 4, lines 13-65), and wherein each window includes one default field on which the cursor arrives after moving from one window to another window (see at least columns 3-4, lines 49-31; figures 2-3, cursor symbols 210, and 302/210). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each window is divided into a plurality of fields and each window includes one default field in order to select an appropriate command for operating and modifying the flight plan.

As per claims 7 and 24, Briffe et al. do not disclose default responsive object. However, Snyder et al. disclose each default field includes one default responsive object (see at least column 4, lines 13-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each default field includes one default responsive object for placing the cursor in an appropriate section in the display for enter a selection in the screen.

Also, as per claims 8 and 25, Briffe et al. do not disclose the auxiliary moving mechanism is a Tab key on a keyboard. However, Briffe et al. disclose a QWERTY keyboard (see at least column 5, lines 26-30); also, Snyder et al. disclose multifunctional keyboard (see at least column 3, line 42). It is well known that a QWERTY keyboard, and a multifunctional keyboard can be programmed to included a Tab key.

As per claims 9 and 26, Briffe et al., and Snyder et al. do not explicitly disclose moving the cursor in the discrete manner on the display is activated during an emergency mode of the aircraft. However, Snyder et al. disclose discrete cursor movement (see at least column 7, lines 59-63), and “absolute motion” (see at least column 6, line 53). It is obvious that an absolute motion of discrete cursor movement implies a single action by the operator, and an action perform during an emergency condition, because the operator only have a very short time to activate a key in a keyboard. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. by combining moving the cursor in the discrete manner on the display is activated during an emergency mode of the aircraft to provide an operator ability to accurately selecting a cursor location during periods of erratic vehicle moment that is easily to place the cursor in an unintended location of the display.

As per claims 10 and 27, Briffe et al. disclose the second cursor control device includes a function operation mechanism configured to automatically move the cursor to a responsive object associated with the function operation mechanism (see at least column 10, line 58 to column 11, line 33).

As per claims 11 and 28, Briffe et al. disclose the function operation mechanism is a function key on a keyboard (see at least column 12, lines 1-8).

As per claims 12 and 29, Briffe et al. disclose the second cursor control device is a keyboard (see at least column 5, lines 26-30). Briffe et al. do not disclose the first cursor control device is a mouse. However, Snyder et al. disclose the first cursor control device is a mouse (see at least column 3, lines 10-11). It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to modify the teach of Briffe et al. by combining the first cursor control device is a mouse in order to select a desired object in the display.

Also, as per claims 14 and 31, Briffe et al. do not explicitly disclose display changing mechanism. However, Snyder et al. disclose a plurality of displays (see figures 2-3), and wherein the first and second cursor control device respectively include first and second display changing mechanism configured to move the cursor from one display to another display in the plurality of displays (see at least columns 3-4, lines 38-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining the first and second display changing mechanism for continuously selection of information in the display or select only one by one object at different screen.

As per claims 15 and 32, Briffe et al. do not explicitly disclose each window is divided into a plurality of fields and each window includes one default field. However, Snyder et al. disclose the at least one window includes a plurality of windows, each window being divided into a plurality of fields including at least one responsive object (see at least column 4, lines 13-65), and wherein each display includes one default field situated on one of the plurality of windows, and on which the cursor arrives after moving from one display to another display (see at least columns 3-4, lines 49-31; figures 2-3, and symbols 210, 302/210). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al. by combining each window is divided into a plurality of fields and each window includes one default field in order to select an appropriate command for operating and modifying the flight plan.

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4. Claims 4,16-17,21, and 33-36, are rejected under 35 U.S.C.103(a) as being unpatentable over Briffe et al. (6,112,141), and Snyder et al. (6,664,989) as applied to claims 3 and 14 above, and further in view of Snyder (6,381,519).

As per claims 4 and 21, Briffe et al. disclose the second activation mechanism is an Enter key on a keyboard (see at least column 5, lines 26-30). Briffe et al., and Snyder et al. ('989) do not disclose a key on a mouse. However, Snyder ('519) discloses the first activation mechanism is a key on a mouse (see at least column 3, lines 24-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining a key on a mouse for selecting and editing data elements appearing on the display.

As per claims 16 and 33, Briffe et al. disclose the second display changing mechanism is a key on a keyboard (see at least column 5, lines 26-30). Briffe et al., and Snyder et al. ('989) do not disclose a key on a mouse. However, Snyder ('519) discloses the first display changing mechanism is a key on a mouse (see at least column 3, lines 24-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining a key on a mouse for selecting and editing data elements appearing on the display.

As per claims 17 and 34, Briffe et al., and Snyder et al. ('989) do not disclose eight displays. However, it is obvious that one can design a display panel with plurality of displays. For example Snyder ('519) disclose in figure 3, and column 4, lines 32-65, four displays are included on an instrumental panel of a flight deck. Also, it is obvious that screen 302 (figure 3 of Snyder) is used by pilot, screen 308 is used by a copilot, and screen 304 and 306 can be

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common used by the pilot and copilot of the aircraft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Briffe et al., and Snyder et al. ('989) by combining eight display screen for conveniently viewing and selecting user interface in the flight panel.

5. Claims 37-40, are rejected under 35 U.S.C.103(a) as being unpatentable over Snyder et al. (6,664,989), and Briffe et al. (6,112,141).

As per claim 37, Snyder et al. disclose a dialog system for dialog between at least one operator of an aircraft and at least one system of said aircraft, comprising: at least two interactive windows, each of said at least two interactive windows including at least one responsive object associated with one of a plurality of functions of said at least one system of said aircraft (see at least columns 3-4, lines 49-65), a first moving mechanism configured to move a cursor on said interactive windows in an actuatable manner so as to designate a responsive object (see at least column 3, lines 39-48); a second moving mechanism configured to move said cursor on said interactive windows in a discrete manner (see at least columns 7-8, lines 61-14), and a third moving mechanism configured to move said cursor from window to window using an auxiliary displacement key (see at least column 3, line 42; and column 4, lines 14-31). Snyder et al. do not explicitly disclose designate a responsive object. However, Snyder et al. disclose user interface cursor control device (CCD) pointer 104, mechanical button control (see at least column 3, lines 39-41), integration of discrete button movement (see at least the abstract); and discrete events applied (see at least column 7, lines 59-65). It would have been obvious to one of ordinary skill in the art that when point and click on the control button, a responsive object is designated; also, each discrete button action designate responsive object by responsive object. Snyder et al. also

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do not explicitly disclose a confirming mechanism. However, Briffe et al. disclose operation of a button or a keyboard involves the action of “capture”, “selection”, “point and click” (see at least columns 11-12, lines 56-8), and multifunctional keyboard (see at least column 12, lines 30-65). It would have been obvious to one of ordinary skill in the art that, the action of “capture”, “selection”, “point and click” implies a confirming mechanism for confirming the designated responsive object either in an actuatable manner or using at least one confirmation key. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Snyder et al. by combining a confirming mechanism to select and a desired object in the display.

As per claim 38, Snyder et al. disclose a fourth moving mechanism configured to move said cursor directly onto a responsive object associated with a function using a function key (see at least column 3, line 42). It is well known that a multifunctional keyboard included a function key.

As per claims 39-40, Snyder et al. disclose cursor is displayed at a default location in a window after moving said cursor from one window to another window (see at least columns 3-4, lines 49-31; figures 2-3; cursors 210, 302/210).

Remarks

6. Applicant's argument filed on 1/13/05 has been fully considered. Upon updated search, the new ground of rejection has been set forth as above.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F (6:30 AM- 4:00 PM), off every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran

A handwritten signature in cursive script, appearing to read 'Dalena Tran', written in black ink.

April 13, 2005